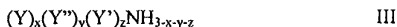


**AMENDMENTS TO THE CLAIMS**

Claims 1-19. (Cancelled)

20. (Previously Presented) A process for preparing a polyamine derivative, comprising:
- (a) reacting one or more polyamine with a first number of one or more molecules selected from the group consisting of lactones, hydroxyacids, cyclic carbonates, and mixtures thereof, to form a polyamine derived compound having one or more member selected from the group consisting of an amide group, a urethane group, and a combination thereof, wherein each of the polyamines comprises a second number of one or more  $\text{-NH}_2$  functional groups and a third number of one or more second amine functional groups, the second amine functional groups having a lower lactone reactivity than the  $\text{-NH}_2$  functional groups; and
  - (b) reacting the polyamine-derived compound with one or more amine-specific reagent to form an intermediate, the amine-specific reagent having a fourth number of two or more amine-specific functional groups selected from the group consisting of isocyanate groups, anhydride groups, acid chloride groups, maleate groups, fumarate groups, citraconic ester groups, itaconic ester groups, and (meth)acrylate groups wherein the polyamine-derived compound is further reacted with an amine modifier being given by formula III:



wherein:

- x is an integer of 0, 1 or 2,
- y is an integer of 0, 1 or 2,
- z is an integer of 0 or 1,
- x+y is 1 or 2,
- x+y+z is 1 or 2,

Y represents an anchoring moiety with affinity for a pigment surface or substrate,

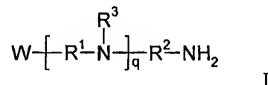


Y'' represents a stabilising moiety with affinity for a matrix, and

Y' represents a further group that is neither an anchoring moiety nor a stabilising moiety;

wherein the intermediate comprises at least one polyamine residue and at least one amine modifier residue linked by the amine-specific reagent.

21. (Cancelled)
22. (Previously Presented) The process according to claim 20, wherein the intermediate comprises two or more polyamine residues.
23. (Previously Presented) The process according to claim 20, wherein the first number of one or more molecules selected from the group consisting of lactone, hydroxy acid, and cyclic carbonate molecules is from 0.1 to 10 times the second number of  $-NH_2$  functional groups of the polyamine.
24. (Cancelled)
25. (Previously Presented) The process according to claim 20, wherein the polyamine is given by formula I



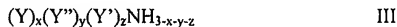
where:

- q is an integer from 1 to 10;
- $R^1$  and  $R^2$  are each independently an alkylene group with from 1 to 10 carbon atoms;
- each  $R^3$  is independently selected from the group consisting of hydrogen, hydroxyalkyls, alkylamines, polyalkylamines and polyalkylpolyamines; and
- W is a hydroxy or an amine.



Claims 26-27. (Cancelled)

28. (Previously Presented) A process for preparing a polyamine derivative, comprising:
- (a) reacting one or more polyamine with one or more molecules selected from the group consisting of lactones, hydroxyacids, cyclic carbonates, and mixtures thereof, to form a polyamine derived compound having one or more member selected from the group consisting of an amide, a urethane group, and a combination thereof, wherein each of the polyamines comprises one or more –NH<sub>2</sub> functional group and one or more second amine functional group, the second amine functional group having a lower lactone reactivity than the –NH<sub>2</sub> functional group; and
  - (b) reacting the polyamine-derived compound with one or more polyisocyanate to form an intermediate comprising two or more isocyanate functionalities wherein the polyamine-derived compound is further reacted with an amine modifier given by formula III:



wherein:

x is an integer of 0, 1 or 2,

y is an integer of 0, 1 or 2,

z is an integer of 0 or 1,

x+y is 1 or 2,

x+y+z is 1 or 2,

Y represents an anchoring moiety with affinity for a pigment surface or substrate,

Y'' represents a stabilising moiety with affinity for a matrix, and

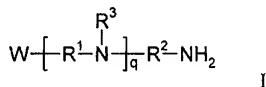
Y' represents a further group that is neither an anchoring moiety nor a stabilising moiety;

wherein the intermediate comprises at least one polyamine residue and at least one amine modifier residue linked by an isocyanate functionality.

29. (Cancelled)



30. (Previously Presented) The process according to claim 28 wherein the intermediate comprises at least two polyamine residues.
31. (Previously Presented) The process according to claim 28, wherein a number of lactone, hydroxy acid, and/or cyclic carbonate molecules is from 0.1 to 10 times the number of  $\text{--NH}_2$  functional groups of the polyamine.
32. (Cancelled)
33. (Previously Presented) The process according to claim 28, wherein the polyamine is given by formula I



where:

q is an integer from 1 to 10,

$\text{R}^1$  and  $\text{R}^2$  are each independently an alkylene group with from 1 to 10 carbon atoms,

each  $\text{R}^3$  is independently selected from the group consisting of hydrogen, hydroxyalkyls, alkylamines, polyalkylamines and polyalkylpolyamines, and

W is a hydroxy or an amine.

Claims 34-36. (Cancelled)